

elucidated that the amino acid sequence structures “MYPPPY (Met-Tyr-Pro-Pro-Pro-Tyr; SEQ ID NO:1)” conserved through animal species is important for the binding of CD28 and CTLA-4 to CD80 (B7-1). It has also been reported that, when CD28 is stimulated, PI3 kinase (phosphoinositide 3 kinase, PI3K) associates with the phosphorylated tyrosine residue in a partial sequence “YMNM (Tyr-Met-Asn-Met; SEQ ID NO:2)” of CD28 and that CD28 plays an important role in intracellular signal transmission through this “YxxM” structure. Furthermore, it has been reported that CTLA-4 also has a sequence represented by “YxxM,” namely “YVKM (Tyr-Val-Lys-Met; SEQ ID NO:3)” in its cytoplasmic region and that, after being stimulated, SYP associates with this sequence.